### SEQUENCE LISTING

#### (1) GENERAL INFORMATION:

- (i) APPLICANT: BYWATER, MARGARET LINDSTROM, PER INGANAS, MATS
- (ii) TITLE OF INVENTION: SEQUENCE-BASED MUTATION ANALYSIS OF NEOPLASTIC TISSUE FOR DIAGNOSIS OR PROGNOSIS OF THE NEOPLASIA
- (iii) NUMBER OF SEQUENCES: 25
- (iv) CORRESPONDENCE ADDRESS:
  - (A) ADDRESSEE: BIRCH, STEWART, KOLASCH AND BIRCH
  - (B) STREET: PO BOX 747
  - (C) CITY: FALLS CHURCH
  - (D) STATE: VA
  - (E) COUNTRY: USA
  - (F) ZIP: 22040-0747
- (v) COMPUTER READABLE FORM:
  - (A) MEDIUM TYPE: Floppy disk
  - (B) COMPUTER: IBM PC compatible
  - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
  - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30

# (vi) CURRENT APPLICATION DATA:

- (A) APPLICATION NUMBER:
- (B) FILING DATE:
- (C) CLASSIFICATION:

#### (viii) ATTORNEY/AGENT INFORMATION:

- (A) NAME: MURPHY JR, GERALD M
- (B) REGISTRATION NUMBER: 28,977
- (C) REFERENCE/DOCKET NUMBER: 1614-178

## (ix) TELECOMMUNICATION INFORMATION:

- (A) TELEPHONE: (703) 205-8000
- (B) TELEFAX: (703) 205-8050

## (2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 19 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: other nucleic acid
  - (A) DESCRIPTION: /desc = "PRIMER"

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	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:1:	
GTG	CTTTC	CA CGACGGTG A	19
(2)	INFO	RMATION FOR SEQ ID NO:2:	
	(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 23 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear	
	(ii)	MOLECULE TYPE: other nucleic acid (A) DESCRIPTION: /desc = "PRIMER"	
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:2:	
TCA'	IGTGC	TG TGACTGCTTG TAG	23
(2)	INFO	RMATION FOR SEQ ID NO:3:	
(	(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 19 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear	
	(ii)	MOLECULE TYPE: other nucleic acid (A) DESCRIPTION: /desc = "PRIMER"	
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:3:	
GGC	GGGGG	TG TGGAATCAA	19
(2)	INFO	RMATION FOR SEQ ID NO:4:	
	(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 23 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear	
	(ii)	MOLECULE TYPE: other nucleic acid (A) DESCRIPTION: /desc = "PRIMER"	

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

TCTGGCATTC TGGGAGCTTC ATC	23	
(2) INFORMATION FOR SEQ ID NO:5:		
<ul> <li>(i) SEQUENCE CHARACTERISTICS:</li> <li>(A) LENGTH: 20 base pairs</li> <li>(B) TYPE: nucleic acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul>		
<pre>(ii) MOLECULE TYPE: other nucleic acid     (A) DESCRIPTION: /desc = "PRIMER"</pre>		
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:		
CCGTCCCAGT AGATTACCAC	20	
(2) INFORMATION FOR SEQ ID NO:6:		
<ul><li>(i) SEQUENCE CHARACTERISTICS:</li><li>(A) LENGTH: 20 base pairs</li><li>(B) TYPE: nucleic acid</li><li>(C) STRANDEDNESS: single</li><li>(D) TOPOLOGY: linear</li></ul>		
<pre>(ii) MOLECULE TYPE: other nucleic acid     (A) DESCRIPTION: /desc = "PRIMER"</pre>		
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:		
GTTTTCCGTC TGGGCTTCTT	20	
(2) INFORMATION FOR SEQ ID NO:7:		
<ul> <li>(i) SEQUENCE CHARACTERISTICS:</li> <li>(A) LENGTH: 27 base pairs</li> <li>(B) TYPE: nucleic acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul>		
<pre>(ii) MOLECULE TYPE: other nucleic acid     (A) DESCRIPTION: /desc = "PRIMER"</pre>		
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:		
CTGTGACTTG CACGTACTCC CCTGCCC	27	

(2) INFORMATION FOR SEQ ID NO:8:

	(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 23 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear	
	(ii)	MOLECULE TYPE: other nucleic acid (A) DESCRIPTION: /desc = "PRIMER"	
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:8:	
	TAGACTGA	CC CTTTTTGGAC TTC	23
	(2) INFO	RMATION FOR SEQ ID NO:9:	
(	(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 21 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear	
	(ii)	MOLECULE TYPE: other nucleic acid (A) DESCRIPTION: /desc = "PRIMER"	
		SEQUENCE DESCRIPTION: SEQ ID NO:9:	21
	(2) INFO	PRMATION FOR SEQ ID NO:10:	
		SEQUENCE CHARACTERISTICS:  (A) LENGTH: 22 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear	
	(ii)	MOLECULE TYPE: other nucleic acid (A) DESCRIPTION: /desc = "PRIMER"	
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:10:	
	TGGTTTCT	TC TTTGGCTGGG GA	22
	(2) INFO	RMATION FOR SEQ ID NO:11:	
	(i)	SEQUENCE CHARACTERISTICS:	

(A) LENGTH: 21 base pairs

(B) TYPE: nucleic acid

	<pre>(C) STRANDEDNESS: single (D) TOPOLOGY: linear</pre>	
	<pre>(ii) MOLECULE TYPE: other nucleic acid     (A) DESCRIPTION: /desc = "PRIMER"</pre>	
	(with groupings procedingson, group no.11.	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:	
GCT'	TTGAGGT GCGTGTTTGT G	21
(2)	INFORMATION FOR SEQ ID NO:12:	
	<ul> <li>(i) SEQUENCE CHARACTERISTICS:</li> <li>(A) LENGTH: 21 base pairs</li> <li>(B) TYPE: nucleic acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul>	
	<pre>(ii) MOLECULE TYPE: other nucleic acid     (A) DESCRIPTION: /desc = "PRIMER"</pre>	
) (		
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:	
CTG	TCAGTGG GGAACAAGAA G	21
(2)	INFORMATION FOR SEQ ID NO:13:	
	<ul> <li>(i) SEQUENCE CHARACTERISTICS:</li> <li>(A) LENGTH: 20 base pairs</li> <li>(B) TYPE: nucleic acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul>	
	<pre>(ii) MOLECULE TYPE: other nucleic acid     (A) DESCRIPTION: /desc = "PRIMER"</pre>	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:	
GGA	GCACTAA GCGAGCACTG	20
(2)	INFORMATION FOR SEQ ID NO:14:	
	<ul> <li>(i) SEQUENCE CHARACTERISTICS:</li> <li>(A) LENGTH: 21 base pairs</li> <li>(B) TYPE: nucleic acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul>	

(	<pre>(ii) MOLECULE TYPE: other nucleic acid</pre>	
(	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:	
GACAC	CGCTTC CCTGGATTGG C	21
(2) I	INFORMATION FOR SEQ ID NO:15:	
	<ul> <li>(i) SEQUENCE CHARACTERISTICS:</li> <li>(A) LENGTH: 22 base pairs</li> <li>(B) TYPE: nucleic acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul>	
B1	(ii) MOLECULE TYPE: other nucleic acid (A) DESCRIPTION: /desc = "PRIMER"	
r (	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:	
GCAAA	AACATC TTGTTGAGGG CA	22
(2) I	INFORMATION FOR SEQ ID NO:16:	
	<ul> <li>(i) SEQUENCE CHARACTERISTICS:</li> <li>(A) LENGTH: 24 base pairs</li> <li>(B) TYPE: nucleic acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul>	
(	<pre>(ii) MOLECULE TYPE: other nucleic acid      (A) DESCRIPTION: /desc = "PRIMER"</pre>	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:	
	GGAGTA CGTGCAAGTC ACAG	24
(2) I	INFORMATION FOR SEQ ID NO:17:	
	<ul><li>(i) SEQUENCE CHARACTERISTICS:</li><li>(A) LENGTH: 22 base pairs</li><li>(B) TYPE: nucleic acid</li><li>(C) STRANDEDNESS: single</li><li>(D) TOPOLOGY: linear</li></ul>	
(	(ii) MOLECULE TYPE: other nucleic acid (A) DESCRIPTION: /desc = "PRIMER"	

(:	xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:	
GTTTC	CGTCT GGGCTTCTTG CA	22
(2) II	NFORMATION FOR SEQ ID NO:18:	
	<ul> <li>(i) SEQUENCE CHARACTERISTICS:</li> <li>(A) LENGTH: 21 base pairs</li> <li>(B) TYPE: nucleic acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul>	
( :	<pre>ii) MOLECULE TYPE: other nucleic acid     (A) DESCRIPTION: /desc = "PRIMER"</pre>	
(:	xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:	
GGTAC	AGTCA GAGCCAACCT C	21
(2) I	NFORMATION FOR SEQ ID NO:19:	
	<ul> <li>(i) SEQUENCE CHARACTERISTICS:</li> <li>(A) LENGTH: 21 base pairs</li> <li>(B) TYPE: nucleic acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul>	
(	ii) MOLECULE TYPE: other nucleic acid (A) DESCRIPTION: /desc = "PRIMER"	
(:	xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:	
GCCAA	CCTCA GGCGGCTCAT A	21
(2) I	NFORMATION FOR SEQ ID NO:20:	
	(i) SEQUENCE CHARACTERISTICS:  (A) LENGTH: 21 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear	
(	<pre>ii) MOLECULE TYPE: other nucleic acid     (A) DESCRIPTION: /desc = "PRIMER"</pre>	

(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:20:	
TGGCCCCT	TCC TCAGCATCTT A	21
(2) INFO	DRMATION FOR SEQ ID NO:21:	
(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 20 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear	
(ii)	MOLECULE TYPE: other nucleic acid (A) DESCRIPTION: /desc = "PRIMER"	
(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:21:	
CAAGGCC	TCA TTCAGCTCTC	20
(2) INFO	DRMATION FOR SEQ ID NO:22:	
(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 21 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear	
(ii)	MOLECULE TYPE: other nucleic acid (A) DESCRIPTION: /desc = "PRIMER"	
(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:22: '	
CGAGTGG?	AAG GAAATTTGCG T	21
(2) INFO	DRMATION FOR SEQ ID NO:23:	
(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 22 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear	
(ii)	MOLECULE TYPE: other nucleic acid (A) DESCRIPTION: /desc = "PRIMER"	

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

22 CGGCGCACAG AGGAAGAGAA TC (2) INFORMATION FOR SEQ ID NO:24: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 23 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: other nucleic acid (A) DESCRIPTION: /desc = "PRIMER" (xi) SEQUENCE DESCRIPTION: SEQ ID NO:24: CGCACACCTA TTGCAAGCAA GGG 23 (2) INFORMATION FOR SEQ ID NO:25: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 21 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: other nucleic acid (A) DESCRIPTION: /desc = "PRIMER"

21

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

GGGGAGCCTC ACCACGAGCT G